

14. (New) The manometer of claim 12, further comprising means connected to the second cathode for measuring discharge current as a function of pressure in the housing.
15. (New) The manometer of claim 14, wherein the second cathode is grounded by way of the current measuring means.
16. (New) The manometer of claim 7, wherein the first and second cathodes are provided with end surfaces forming apertures therein for receiving the anode.
17. (New) The manometer of claim 16, wherein at least one of the apertures is dimensioned to form a predetermined flow resistance to contaminating gases.
18. (New) The manometer of claim 7, further comprising means for replaceably mounting at least one of the first and second cathodes.
19. (New) The manometer of claim 18, wherein the mounting means comprises a snap ring.
20. (New) The manometer of claim 12, wherein the means for electrically energizing the second cathode comprises at least one vacuum-proof insulated conduit extending through the housing and provided with a vaporization protection.
21. (New) The manometer of claim 7, wherein the anode is mounted in the housing by a vacuum proof threaded connection.


#### **Remarks**

For the Examiner's convenience Applicants are submitting a substitute specification including the amended claims in a first version showing amendatory marks and a second clean version.

Having regard to the rejection of claims 1 and 2 on grounds of alleged anticipation (35 U.S.C. 102) in view of U.S. Patent 6,351,131 (Klepper et al.), Applicants respectfully point out to the Examiner that he appears to have misinterpreted the teachings of that reference. The distinction between Klepper et al. and Applicants' invention is believed to have been clarified by Applicants' new claim 7 which makes it clear that the anode extends through the tubular cathodes rather than being "sandwiched" between the cathodes. In fact, the prior art manometer is purports to be an improved Penning-type manometer. By contrast, Applicant's device is a cold cathode ionization manometer of the "inverse magnetron" type. Whereas Klepper et al. primarily use their apparatus as an auxiliary means for examining by way of spectral analysis the chemical composition of a gas, Applicant's apparatus is designed to prevent premature deterioration as it were as a result of particle precipitation and electrode deterioration. It is accomplished by the first electrode burning off harmful particles and by the second functioning exclusively in connection with the measuring chamber. There is nothing in Klepper et al. which suggests, much less teaches, such an arrangement.

It is believed that in view of the above remarks and the amended specification and claims, the instant application is in condition for allowance which is earnestly solicited.

Respectfully submitted,



Karl Hormann  
Registration No.: 26,470

Area Code 617.491.8867